1. (Once Replaced)

A method for treating a wound, comprising the

steps of:

positioning an ultrasound transducer having a distal radiation surface at a distance d from the surface of the wound; and

creating an ultrasound standing wave between the surface of the wound and the distal radiation surface, where the distance d is determined by the formula:

 $d= n X \lambda 2$ ,

wherein  $\lambda$  is the wavelength of the ultrasound standing wave and n is a positive integer, and wherein the ultrasound standing wave creates radiation pressure for providing a bactericidal and a therapeutic effect to the wound for decreasing the healing time for the wound.

3. (Once Replaced) The method of Claim 1, wherein the distance d is at least 0.1 inch.

9. (Once Replaced) A system for treating a wound with ultrasound standing waves, comprising:

means for generating ultrasound waves including an ultrasound transducer having a distal radiation surface; and

means for creating at least one ultrasound standing wave by adjusting the distance between the distal radiation surface and a surface of the wound, wherein the at least one ultrasound standing wave creates radiation pressure for providing a bactericidal and a therapeutic effect to the wound for decreasing the healing time for the wound.

**K**3

Ad

P5

- The system of Claim 9, wherein the transducer is driven by at least one of a pulsed and modulated frequency.
- 20. The system of Claim 9, wherein the driving wave form of the transducer is selected from the group consisting of sinusoidal, rectangular, trapezoidal and triangular wave forms.
- 21. The system of Claim 9, further comprising means for focusing the at least one ultrasound standing wave.
  - 22. A method for treating a wound comprising the steps of:

providing a transducer having a distal radiation surface arranged a distance from the surface of the wound for emitting ultrasonic waves; and

creating ultrasound standing waves between the surface of the wound and the distal radiation surface by adjusting the distance, wherein the ultrasound standing waves create radiation pressure for providing a bactericidal and a therapeutic effect to the wound for decreasing the healing time for the wound.

23. The method of Claim 22, wherein the transducer operates at a frequency from 10 kHz to 10,000 MHz.

cacluded

- 24. The method of Claim 22, wherein the distance is at least 0.1 inch.
- 25. The method of Claim 22, further comprising the steps of:
  driving the transducer by pulsed or modulated frequency; and
  selecting the driving wave form of the transducer from the group consisting of sinusoidal,
  rectangular, trapezoidal and triangular wave forms.
- 26. The method of Claim 22, wherein the therapeutic effect is selected from the group consisting of increasing blood flow to the wound, mechanically cleansing the wound, dissolving blood clots, diffusing grafts, stimulating cell growth, providing at least one medicament to the wound, and penetrating at least one medicament through the surface of the wound.
  - 27. The method of Claim 22, further comprising the steps of:
    applying a drug to the wound; and
    penetrating the drug through the surface of the wound using the radiation pressure created
- 28. The method of Claim 22, further comprising the step of providing a bushing around the distal radiation surface for increasing the radiation pressure created by the ultrasound standing waves.

by the ultrasound standing waves.